

## WORLD INTELLECTUAL PROPERTY ORGAN International Bureau



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6: C12Q 1/68, C12P 19/34, C07K 13/00, G06F 17/00

(11) International Publication Number:

WO 00/05414

(43) International Publication Date:

3 February 2000 (03.02.00)

(21) International Application Number:

PCT/US99/16417

(22) International Filing Date:

<sup>v</sup> 21 July 1999 (21.07.99)

(30) Priority Data:

60/093,641

21 July 1998 (21.07.98) US US

29 October 1998 (29.10.98) 09/181,601

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications

US 60/093,641 (CIP) 21 July 1998 (21.07.98) Filed on 09/181,601 (CIP) US 29 October 1998 (29.10.98) Filed on

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- (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

## Published

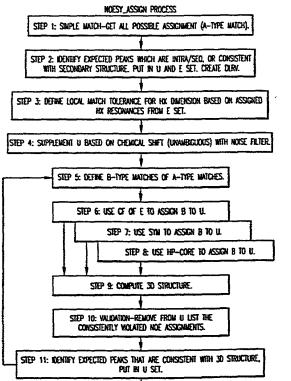
With international search report.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: LINKING GENE SEQUENCE TO GENE FUNCTION BY THREE DIMENSIONAL (3D) PROTEIN STRUCTURE DETERMINATION

## (57) Abstract

The present invention provides a structure-functional analysis engine for the high-throughput determination of the biochemical function of protein domains of unknown function, as exemplified in the flowchart of the figure. The present invention uses bioinformatics, molecular biology and nuclear magnetic resonance tools for the rapid and automated determination of the three-dimensional structures of proteins and protein domains.



STEP 12: BACK CALCULATE ALL POSSIBLE NOE'S THAT ARE EXPECTED FROM STRUCTURE. OUTPUT ANY PREDICTED ASSIGNMENTS NOT IN U OR A UST AND PEAKS STILL IN THE A LIST.